Sisson, Bradley

From: KBKing@MBF-LAW.com
Sent: Thursday, July 13, 2000 10:24 AM
To: bradley.sisson@uspto.gov
Subject: FW: Proposed Amendments for U.S. Patent Application Serial No. 09 /475,958; Bitner et al. CELL CONCENTRATION AND LYSATE CLEARANCE USING PAR AMAGNETIC PARTICLES(Docket No. 16026-9038)

B0008761.DOC

FILE COPY

-----Original Message-----
From: King, Karen B.
Sent: Thursday, July 13, 2000 9:03 AM
To: 'bbradley.sisson@uspto.gov'
Subject: Proposed Amendments for U.S. Patent Application Serial No. 09/475,958; Bitner et al. CELL CONCENTRATION AND LYSATE CLEARANCE USING PARAMAGNETIC PARTICLES(Docket No. 16026-9038)

Examiner Sisson -

Attached hereto please find proposed claim amendments for claims 1, 8 and 21 of U.S. Patent Application No. 09/475,958. We look forward to discussing the proposed amendments with you.

<<B0008761.DOC>>

Sincerely yours,

Karen B. King
MICHAEL BEST & FRIEDRICH LLP
One South Pinckney St.
P.O. Box 1806
Madison, WI 53701-1806

Direct Dial: (608) 283-0110
Firm Phone: (608) 257-3501
FAX: (608) 283-2275
EMAIL: <mailto:kbking@mbf-law.com>
Firm Homepage: <http://www.mbf-law.com>

received this communication in error, please return it
to the sender immediately and delete the original message and any
copy of it from your computer system. If you have any questions
concerning this message, please contact the sender.
+-+

PROPOSED AMENDMENTS FOR
U.S. Patent Application Serial No. 09/475,958
CELL CONCENTRATION AND LYSATE CLEARANCE
USING PARAMAGNETIC PARTICLES
(Docket No. 16026-9038)
DATE GENERATED: 7/12/00

We claim:

1. A method of using magnetic particles to concentrate or harvest cells, comprising the steps of:

(a) combining cells with magnetic particles, under conditions wherein the cells selectively adsorb directly to the particles thereby forming a complex [form a complex with the magnetic particles], wherein said magnetic particles are selected from the group consisting of (1) pH dependent ion exchange particles and (2) silica magnetic particles consisting essentially of a magnetic core coated with a siliceous oxide having a hydrous siliceous oxide adsorptive surface; and

(b) isolating the complex from the solution by application of magnetic force.

8. A method of clearing a solution of disrupted biological material, according to steps comprising:

(a) providing a solution comprising a disrupted biological material;

(b) combining the solution with second magnetic particles under conditions wherein the disrupted biological material selectively adsorbs directly to the particles, thereby forming [forms] a complex [with the second magnetic particles], wherein said magnetic particles are selected from the group consisting of (1) pH dependent ion exchange particles and (2) silica magnetic particles consisting essentially of a magnetic core coated with a siliceous oxide having a hydrous siliceous oxide adsorptive surface; and

(c) separating the complex from the solution by application of magnetic force.

21. A method of isolating a target nucleic acid from a disrupted biological material, comprising the target nucleic acid, a first non-target material, and a second non-target material, comprising the steps of:

(a) combining a solution of the disrupted biological material with first magnetic particles under conditions wherein the first non-target material selectively adsorbs directly to the particles, thereby forming [forms] a first complex [with the first magnetic particles], wherein said magnetic particles are selected from the group consisting of (1) pH dependent ion exchange particles and (2) silica magnetic particles consisting essentially of a magnetic core coated with a siliceous oxide having a hydrous siliceous oxide adsorptive surface;

(b) separating the first complex from the solution of disrupted biological material by application of magnetic force, forming a cleared solution comprising the target nucleic acid and the second non-target material;

(c) combining the cleared solution with second magnetic particles under conditions wherein the target nucleic acid adsorbs to the second magnetic particles, forming a second complex;

(d) isolating the second complex from the cleared solution;

(e) washing the second complex by combining the second complex with a wash solution and separating the second complex from the wash solution by magnetic force; and

(f) combining the washed second complex with an elution solution, under conditions wherein the target material is desorbed from the second magnetic particles.